BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Ligado Request that the Commission Initiate a	)	IB Docket No. RM-11681
Rulemaking to Allocate the 1675-1680 MHz Band	)	
For Terrestrial Mobile Use Shared with Federal Use	)	

COMMENTS

The Aerospace Industries Association (AIA), the leading voice of the U.S. aerospace and defense industry, wishes to express its continued concern over the plans put forward by New LightSquared LLC (hereinafter Ligado, its new name) requesting that the Federal Communications Commission (FCC) initiate a rulemaking to allocate the 1675-1680 MHz band for terrestrial mobile use on a shared basis with federal use.[1] Such sharing not only puts at risk the technologically advanced, soon-to-be-launched Geostationary Operational Environmental Satellite-R Series (GOES-R) weather satellite, but also American commerce and public safety including emergency response, national and homeland security, and aviation safety—the last item being of especial importance to our community. In addition to the concerns we expressed in our initial comments on the related public notice[2], there are other issues that may threaten reliability of the Meteorological-Satellite and Meteorological-Aids (radiosondes) Services arising from Ligado's latest proposal.

We offer the following for further consideration on this matter:

I. GOES-R Re-broadcast (GRB) Reliability Must Be Maintained

Others have made a strong case for the in-band interference in 1675-1680 MHz. The power levels proposed are significant and will likely impact the adjacent band where GOES-R has a spectrally-efficient downlink just above 1680 MHz. The current receivers are open well below 1680 MHz since this is now an exclusive meteorological and MET aid band; they have already undergone filter redesign to protect from adjacent band interference from existing terrestrial services - which would not be adequate for these signals ten million times stronger than the desired satellite signal.

II. Ligado Must Address Cybersecurity Risks That a Terrestrial Network Will Introduce

[1] LightSquared Petition for Rulemaking to Allocate the 1675-1680 MHz Band for Terrestrial Mobile Use, RM-11681 (filed. Nov. 2, 2012)("LightSquared Allocation Petition")

[2] Reply Comments of The Aerospace Industries Association in re LightSquared Petition for Rulemaking to Allocate the 1675-1680 MHz Band for Terrestrial Mobile Use, RM-11681 (filed Dec. 21, 2012).

An alternative terrestrial solution to distribute GOES-R L1B and L2 data, in lieu of a GOES-R rebroadcast, poses a new cyber security risk and a lessened reliability compared to current methods. The direct GOES-R broadcast protects against a "last mile" failure for conventional terrestrial communications.

III. Current Low Latency Requirements Must Be Maintained

There are stringent, life-saving or property-protecting events associated with the GOES-R data that are time critical - such as the 3 second latency for space-weather data associated with the natural radiation environment at geo orbit. These warnings protect orbiting satellites, passengers and crew on "over-the-pole" aviation flights and space walking astronauts. The delay via a more complex terrestrial network would not provide the same warning latency.

IV. Interference to NWS Direct Readout Stations Must Be Addressed

The weather data the FAA uses originates from the broadcast and raw data reception at NOAA stations, which is then conveyed to FAA and pilots. Additionally image mosaics used by aviation forecasters to create convective warnings are received by the direct broadcast at NOAA receive stations in this spectrum. RF interference to the direct readout stations would impact both these image tools and the products disseminated further via NOAAPORT affecting the FAA and others.

V. AIA Supports Comments by Aerospace Stakeholders

Finally, AIA expresses its support for aerospace stakeholders who have participated in this proceeding by filing in response to Ligado's request—namely Lockheed Martin Corporation, The American Meteorological Society and The National Weather Association. AIA concurs with the comments its fellow aerospace industry stakeholders have offered into the docket.

CONCLUSION

In view of the above, AIA requests that the FCC not grant Ligado's petition for rulemaking until the issues above have been addressed. AIA remains available to provide the Commission's staff with relevant aerospace expertise to respond to any questions that may result in this proceeding.

Respectfully submitted,

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June 21, 2016